

CLAIMS

1. A method of analysing a sample's unconjugated saccharide content, comprising the steps of (i) passing the sample through a solid phase extraction device to obtain a specimen comprising separated unconjugated saccharide and (ii) analysing the specimen's saccharide content to give
5 the unconjugated saccharide content of the sample.
2. A method of preparing a sample for analysis of its unconjugated saccharide content, comprising the step of passing the sample through a solid phase extraction device.
3. In a method of analysing the unconjugated saccharide content of a sample, the improvement consisting of passing the sample through a solid phase extraction device.
- 10 4. The method of any of claims 1 to 3 comprising the step of measuring the sample's total saccharide content.
5. The method of any of claims 1 to 4 wherein the conjugated saccharide is a saccharide antigen conjugated to a carrier protein.
6. The method of any of claims 1 to 5 wherein the sample is a vaccine.
- 15 7. The method of claim 6 wherein the vaccine is a glycoconjugate vaccine.
8. The method of claim 7 wherein the glycoconjugate vaccine is a single vaccine.
9. The method of claim 7 wherein the glycoconjugate vaccine is a combined vaccine.
10. The method of claim 9 wherein the combined glycoconjugate vaccine comprises a conjugate from meningococcal serogroup C.
- 20 11. The method of claim 10 wherein the glycoconjugate vaccine comprises mixtures of conjugates from each of meningococcal serogroups C and Y.
12. The method of claim 10 wherein the glycoconjugate vaccine comprises mixtures of conjugates from each of meningococcal serogroups C, W135 and Y.
13. The method of claim 10 wherein the glycoconjugate vaccine comprises mixtures of conjugates
25 from each of meningococcal serogroups A, C, W135 and Y.
14. The method of claim 10 wherein the glycoconjugate vaccine comprises mixtures of conjugates from each of meningococcal serogroups A and C.
15. The method of any of claims 10 to 14 comprising the step of analysing the sample's unconjugated content of *N.meningitidis* serogroup C saccharide.

16. A method of separating a conjugated saccharide component in a sample from an unconjugated saccharide component in the sample, comprising the step of passing the sample through a solid phase extraction device.
17. In a method of separating a conjugated saccharide component in a sample from an unconjugated saccharide component in the sample, the improvement consisting of passing the sample through a solid phase extraction device.
18. The use of a solid phase extraction device for separating a conjugated saccharide component in a sample from an unconjugated saccharide component in the sample.
19. The method of claim 16 or claim 17 or the use of claim 18 wherein the conjugated saccharide is a saccharide antigen conjugated to a carrier protein.
20. The method of any of claims 16, 17 or 19 or the use of claim 18 or claim 19 wherein the sample is a vaccine.
21. The method or use of claim 20 wherein the vaccine is a glycoconjugate vaccine.
22. The method or use of claim 21 wherein the glycoconjugate vaccine is a single vaccine.
23. The method or use of claim 22 wherein the glycoconjugate vaccine is a combined vaccine.
24. The method or use of claim 23 wherein the combined glycoconjugate vaccine comprises a conjugate from meningococcal serogroup C.
25. The method or use of claim 24 wherein the glycoconjugate vaccine comprises mixtures of conjugates from each of meningococcal serogroups C and Y.
26. The method or use of claim 24 wherein the glycoconjugate vaccine comprises mixtures of conjugates from each of meningococcal serogroups C, W135 and Y.
27. The method or use of claim 24 wherein the glycoconjugate vaccine comprises mixtures of conjugates from each of meningococcal serogroups A, C, W135 and Y.
28. The method or use of claim 24 wherein the glycoconjugate vaccine comprises mixtures of conjugates from each of meningococcal serogroups A and C.
29. The solid phase extraction device obtained by a method of any of claims 1 to 17 or 19 to 28.
30. The effluent obtained by a method of any of claims 1 to 17 or 19 to 28.
31. The eluate obtained by eluting the retentate from the solid phase extraction device obtained by a method of any of claims 1 to 17 or 19 to 28.
32. A method of releasing a vaccine for use by physicians, comprising the steps of: (a) manufacturing a vaccine comprising a conjugated saccharide; (b) analysing the vaccine's

unconjugated saccharide content by a method of claim 1 or 3; and, if the results from step (b) indicate a saccharide content acceptable for clinical use, (c) releasing the vaccine for use by physicians.

- 5 33. A method for preparing a vaccine composition, comprising a step of analysing the vaccine's unconjugated saccharide content by a method of claim 1 or claim 3, including a step of pH measurement, followed by a step of adjusting the pH of the composition to a desired value *e.g.* between 6 and 8, or about 7.
- 10 34. A method for packaging a vaccine, comprising the steps of: (a) manufacturing a bulk vaccine containing a conjugated saccharide; (b) analysing the unconjugated saccharide content in the bulk vaccine by a method of claim 1 or claim 3; (c) optionally, analysing the bulk vaccine for pH and/or other properties; and, if the results from step (b) and (c) indicate that the bulk vaccine is acceptable for clinical use, (d) preparing and packaging the vaccine for human use from the bulk.